

Explore the Possibilities

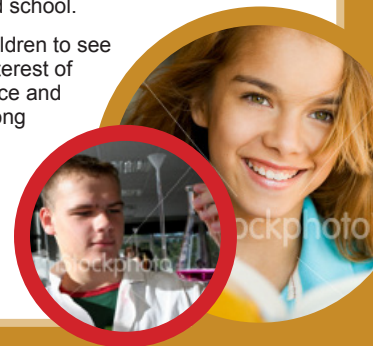
Many of the challenges we face such as finding new energy sources, responding to the health needs of an ageing population and developing sustainable food supplies rely on innovative uses of science, technology, engineering and maths (STEM). STEM skills and qualifications open the doors to exciting and rewarding careers...what can parents and families do to help their children make the right choices and keep their options open?



The Big Bang™
UK Young Scientists & Engineers Fair

Our Top Ten Tips

1. Encourage your children's interest by taking them to science festivals, science and technology exhibitions and museums that explore the application of STEM in innovative ways. Look out for science and maths related TV programmes.
2. Help your children to see that qualifications in science and maths keep their options open. They are valued by a wide range of different sectors and required for entry to a number of very popular career areas such as computer games design, medicine, architecture and engineering. See the internet sources overleaf for further information and advice.
3. Talk to your child's school about the opportunities for extra-curricular activities such as visiting speakers or role models e.g. STEM Ambassadors. Take advantage of residential opportunities for young people such as Go4SET and Headstart run by Engineering Development Trust, Get Ahead with STEM run by the Smallpeice Trust and Salter Chemistry Camps. For more information see www.stemdirectories.org.uk
4. Help schools to deliver STEM related work experience that broadens young people's horizons. Can you support a work placement, or do you know someone who can?
5. Check in with your child's school to make sure you are aware of any special events happening locally e.g. careers activities or the annual Science and Engineering week in March each year. See www.britishtscienceassociation.org/web/nsew
6. Make sure young people are aware of the value placed on science and maths related subjects in the work place. The demand for graduates in these areas will continue to rise and there is evidence that chemistry, physics, engineering and maths graduates will earn on average 30% more in their working lifetime than other graduates. Research suggests more should be done to raise awareness of young women in particular to future earning potential. Check out www.wisecampaign.org.uk and www.wiset.org.uk for resources targeted specifically at engaging more young women in STEM careers.
7. Help your child to explore the full range of education pathways available to ensure they make the choice that suits them best. The national publications Which way now? and It's your choice are there to provide information and advice on the full range of options 14-19 including A levels, Diplomas and Apprenticeships. Remember information all the courses available locally can be seen in the online 14-19 prospectus. <http://yp.direct.gov.uk/14-19prospectus/>
8. Keep the dialogue open. Young people need encouragement to persevere and achieve in subjects they may find challenging.
9. Talk to your children about what they have done in science, maths, design and technology (D&T) classes. Help them to see the links to the world beyond school.
10. Support your children to see the value and interest of working at science and maths and the long term benefits of achieving STEM skills and qualifications.



Some useful websites



Science, technology, engineering and mathematics careers information and resources at:

www.futuremorph.org with a link to the invaluable Careers website checklist

www.mathscareers.org.uk

Information for parents on careers and education at:

www.connexions-direct.com/jobs4u

www.connexions-direct.com/parentcarer

www.direct.gov.uk/en/Parents/Schoolslearninganddevelopment/HelpingYourChildToLearn/index.htm

www.bbc.co.uk/schools/parents

Other STEM initiatives and careers information

Sites with a focus on girls

www.wisecampaign.org.uk , www.wiset.org.uk

and women in SET

www.ukrc4setwomen.org

Science information for parents -

www.planet-science.com/parents/

Courses and activities to promote engineering -

www.tomorrowsengineers.org.uk/

Chemistry residentials - www.salters.co.uk/camps

Widening participation into STEM - www.getaheadwithstem.org.uk

Widening access to higher education - www.thelep.org.uk/home and www.stimulatingphysics.org , Chemistry for our Future and More Maths Grads are combining into one scheme www.stemprogramme.com

Festivals, CREST awards and National Science and Engineering Week - www.nsew.org.uk

STEM ambassadors and after school science clubs - www.stemnet.org.uk -

A site promoting museums and heritage sites across the UK - www.24hourmuseum.org.uk

